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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/573,559

03/27/2006

Bartolomeus Wilhelmus Van Geest

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

NGUYEN, JIMMY H

ART UNIT

PAPER NUMBER

2629

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/573,559	Applicant(s) VAN GEEST ET AL.	
	Examiner JIMMY H. NGUYEN	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/10/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This Office Action is made in response to applicant's preliminary amendment filed on 03/27/2006. Claims 1-11 are currently pending in the application. An action follows below:

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 9/10/2007 is being considered by the examiner.

Specification

3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

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In the instant case, there is no section heading, such as “Background of the Invention”, “Brief Summary of the Invention”, and etc., in the specification.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claim 11 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. This claim defines “a computer program product” comprising functional descriptive material (i.e., a computer program). However, the claim does not define a “computer-readable medium or computer-readable memory” and is thus non-statutory for that reason (i.e., “When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized” - Guidelines Annex IV). The scope of the presently claimed invention encompasses products that are not necessarily computer-readable, and thus NOT able to impart any functionality of the recited program.

The examiner suggests amending the claim(s) to embody the program on “a memory”, “a computer-readable medium” or equivalent; assuming the specification does NOT define the computer readable medium as a “signal”, “carrier wave”, or “transmission medium” which are deemed non-statutory. Any amendment to the claim would be commensurate with its corresponding disclosure.

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Claim 11 appears to be an abstract idea rather than a practical application of the idea. Claim 11 does not result in a physical transformation nor does it appear to provide a useful, concrete and tangible result. Therefore, claim 11 appears non-statutory.

The examiner suggests amending the claim(s) to further recite “causing a display to display said output image” at the end of this claim, in order to recite the practical application (i.e., useful, concrete and tangible result) of the abstract ideas.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 1, 10 and 11, these claims recite a feature, “receiving a second signal representing positional information of a viewer of the output image, as function of time” in lines 6-8 of claim 1, lines 5-6 of claim 10, and lines 9-10 of claim 11. Since it is not clear what “a viewer of the output image” is meant, it is considered that the invention is not clearly defined.

As to claims 2-9, since these claims depend upon claim 1, these claims are therefore rejected for the same reason set forth in claim 1 above.

Due to the above rejection under 35 USC 112, second paragraph, the following art rejection is based as best understood by the examiner.

Claim Rejections - 35 USC § 103

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8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-4 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Geest et al. (US 2003/0035001 A1), hereinafter Van Geest, and further in view of Travers et al. (US 5,373,857), hereinafter Travers.

As to claims 1, 10 and 11, Van Geest discloses a display apparatus (200; Fig. 2A) for displaying an output image on basis of 3D visual information (see Abstract), the display apparatus (101) comprising:

first receiving means (110) for receiving a first signal representing the 3D visual information (paragraph [0034]);

second receiving means (104) for receiving a second signal (a signal from a sensor 124; Fig. 2A; paragraph [0040]) representing positional information of a viewer of the output image (paragraph [0039]), as function of time, the positional information being relative to the display apparatus (200) (paragraph [0040]);

rendering means (108) for rendering the output image on basis of the first signal and the signal (204) representing the positional information of the viewer (paragraphs [0042]-[0044]);
and

display means (112; Fig. 2A) for displaying the output image (paragraph [0042]).

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Van Geest does not explicitly teach filtering means for high-pass filtering the second signal (P), resulting in a third signal. Accordingly, Van Geest discloses all limitations of these claims except for filtering means, as defined in these claims.

However, Travers discloses a related 3D display apparatus comprising receiving means (a connector 90, 92, 94; Fig. 3) for receiving from sensors (26, 28) a signal representing positional information of a viewer (col. 3, lines 46-61) and filtering means (bandpass filter or a high pass filter (60, 60'); Fig. 3; col. 4, lines 17-23) for high-pass filtering the signal and resulting in another signal (Fig. 2 or 3). It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to provide the high pass filter in the display apparatus of Van Geest, in view of the teaching in the Travers reference, because this would provide a low cost head tracker capable of producing output signal representing the orientation of the user's head, as taught by the Travers reference (see Abstract).

As to claim 2, Van Geest further teaches the display apparatus receiving the 3D visual information comprising an input image and a corresponding depth map (Fig. 1A; paragraph [0039]).

As to claim 3, Van Geest teaches that wherein for a predetermined value of the third signal (PF) the input image and the output image are substantially mutually equal (paragraph [0039]).

As to claim 4, Van Geest teaches a display apparatus further comprising clipping means (202; Fig. 2A) for clipping the third signal between a lower limit and an upper limit (paragraph [0043]).

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As to claim 9, Van Geest teaches that the display apparatus is a multi-view display device being arranged to render a further output image and to display the output image in a first direction and to display the further output image in a second direction (paragraphs [0043]-[0045]).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy H. Nguyen whose telephone number is 571-272-7675. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached at 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jimmy H Nguyen/

Primary Examiner, Art Unit 2629